

County Borough of South Shields.



REPORT

ON THE

Health of the Borough

DURING 1909,

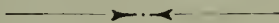
BY

SYDNEY G. MOSTYN, M.A., M.B., D.P.H.,

MEDICAL OFFICER OF HEALTH,

MEDICAL SUPERINTENDENT OF DENES FEVER HOSPITAL

AND WHITELEAS SMALLPOX HOSPITAL.



SOUTH SHIELDS :

R. SIMPSON & SONS, PRINTERS, CHAPTER ROW.

1910.

COUNTY BOROUGH OF SOUTH SHIELDS.



HEALTH COMMITTEE.

THE MAYOR (Councillor G. T. GREY) *Ex-officio*.

ALDERMAN	ROBERTSON	COUNCILLOR	GILROY.
	(Chairman).		HALL.
	GIBBON.		HILTON.
	GRANT.		PETTLER.
	REAY.		RICHARDSON.
	SCOTT.		ROBERTSON.
COUNCILLOR	ANDERSON.		SEMPLE
	ARMSTRONG.		(Vice-Chairman).
	BATEY.		BEN. SMITH.
	CLARK.		EDWARD SMITH.
	DUNLOP.		JOHN O. SMITH.
	GALLOWAY.		VINE.



STAFF OF THE HEALTH DEPARTMENT.

Medical Officer of Health and Medical Superintendent of Borough Hospitals :

S. G. MOSTYN, M.A., M.B., D.P.H.

Deputy Medical Officer of Health, etc. :

W. DALZIEL, L.R.C.P., L.R.C.S.

Superintendent of Public Slaughterhouse and Inspector under Food and Drugs Acts, etc. :

M. J. POLLOCK.

District Inspectors of Nuisances :

W. CLARK, R. W. WEIR, R. AYRE, and W. A. C. HILL.

Inspector of Midwives and Health Visitor :

MISS A. T. IMESON.

Clerks :

J. YEOMAN and E. H. GRAY.

Matron, Fever Hospital :

MISS I. INGRAM.

INDEX TO CONTENTS.

REPORT, 1909.

	PAGE.
Introductory	5
Area of Borough	6
Bacteriological Laboratory	17
Births	6
Birth-rates and Death-rates, etc., compared with the large towns, etc. ..	9-10
Deaths	6-10
Deaths, classified according to Causes, Ages, Seasons, etc. ..	42-57
Denes Fever Hospital	18-20
General Sanitary Work—	
Back Lanes	21
Common Lodging Houses	24
Cowsheds, Dairies and Milkshops	27
Factory and Workshop Acts	24-26
Food Inspection	27
Fried Fish Shops	27
Gut-Scraping	27
Health Visitor	29-30
Houses-Let-in-Lodgings	24
Housing of the Working Classes Acts	23
Ice Cream Shops	27
Midwives Act, 1902	28-29
Nuisances	21
Public Health Acts Amendment Act, 1907	21-23
Public Slaughterhouse	27
Seamen's Lodging Houses	24
Triperies	27
Tyne Dock Mortuary	27
Water Supply	27
Hospitals	18-20
Hospital, New, for Infectious Diseases	20
„ Joint Smallpox	20
Infantile Mortality	8, 54-55
Infectious Disease (Notification) Act, 1889	11-14
Infectious Diseases—	
Cerebro-Spinal Meningitis	20
Cholera	14
Continued Fever	13
Diarrhoea	14
Diphtheria	14
Enteric Fever	13, 20
Erysipelas	14
“Fever”	13
Measles	14-15
Membranous Croup	14
Plague	14

INDEX TO CONTENTS.—CONTINUED.

	PAGE.
Infectious Diseases—Continued—	
Puerperal Fever	14
Relapsing Fever	13
Scarlet Fever	12-13, 18
Smallpox	12
Tuberculosis	15-17
Typhoid Fever	13, 20
Typhus Fever	13-14
Whooping Cough	15
Inquests	7
Inspectors' Reports—	
Cases Removed to Hospital (Table D.)	38
Disinfection (Table E.)	38
Food and Drugs Acts, Samples taken and Results (Table G.)	39
Food Condemned (Table H.)	40
Nuisances dealt with (Table A.)	32-33
Structural Work carried out (Table B.)	34-36
Visits of Inspectors (Tables C. and F.)	37-38
Institutions (Public): Deaths in	7
Meteorology	58
Population	6
Reports: Inspectors'	31-40
School Children: Medical Inspection of	5
Schools and Infectious Diseases	14-15
Statistical Tables	41-58
Uncertified Deaths	7-8
Vital Statistics	6-17
Whiteleas Smallpox Hospital	20
Zymotic Diseases	8-9

SUMMARY OF VITAL STATISTICS, 1909.

Area of Borough	2,399 acres.
Population, estimated to June 30th, 1909	117,627
Number of Births	3,388
Birth Rate	28.9
Number of Deaths	1,779
Death Rate	15.1
Number of Deaths under one year	468
Infantile Mortality Rate	138
Number of Deaths from Zymotic Diseases—	
Smallpox	0
Measles	38
Scarlet Fever	19
" Fever " (Typhoid)	4
Diphtheria	20
Whooping Cough	36
Diarrhoea	42
Zymotic Death Rate	1.35
Number of Deaths from all Tuberculous Diseases	198
Death-rate from Tuberculosis	1.68

INTRODUCTORY.

To the Chairman and Members of the Health Committee.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour of submitting to you my Sixth Annual Report, the thirty-fifth report presented to you by successive Medical Officers of Health.

I am glad to be able to announce a further decrease in the death-rate of the Borough. This rate, 15.1 per 1,000 of the population, is a considerable improvement on 15.5, the rate for 1908, which was previously the lowest death-rate on record for the Borough. Scarlet Fever showed signs of becoming very prevalent during the summer and autumn months, but died away later. Under the Tuberculosis Regulations, 1908, I now receive notification of all cases of Pulmonary Tuberculosis in poor law patients. This should prove of use in preventing the spread of this disease. The medical examination of school children under the Education (Administrative Provisions) Act, 1907, has been carried out by a Medical Officer appointed under the Education Committee. I hope that the Council will arrange some scheme by which the valuable information thus obtained may be used by those responsible for the public health, both for the benefit of the children individually and for the physical improvement of the community.

I wish to express the loss to the Health Department, and to myself personally, caused by the death of the late Chairman. Alderman John Inrie was for almost thirty years a member of the Town Council, and was elected Chairman of the Health Committee when that Committee was constituted in November, 1900. The intimate knowledge that he had of the history of the town and of its people, and his ripe experience were always at the service of the Health Department, even when his last illness made him unable to attend meetings of the Committee.

I am, Gentlemen,

Yours obediently,

S. G. MOSTYN,

MEDICAL OFFICER OF HEALTH.

HEALTH OFFICE,

SOUTH SHIELDS,

22ND MARCH, 1910.

HEALTH REPORT, 1909.

VITAL STATISTICS.

Area of Borough.—2,399 acres, including inland water (55 acres), but excluding foreshore and tidal water (246 acres).

Population.—The Registrar-General estimated the population of the Borough to be, at June 30th, 1909, 117,627. The density of population per acre is 49.0 on the above estimate. The Registrar-General bases his calculation of the population on the census of 1891 and 1901. It is probable that the population of South Shields has not increased since 1901 as rapidly as the method used would suggest. By taking the excess of births over deaths since the last census, and making no allowance for emigration or immigration, the population would amount to 114,600; while from the number of names on the Burgess Roll, I would estimate the population at about 112,000. A correct knowledge of the population is essential for accurately determining the death-rates and birth-rates. When we learn the result of the next census in 1911, it may be necessary to add five per cent. to our present estimates of the birth and death rates. It is greatly to be hoped that a quinquennial census will shortly be established.

Births.—There were 3,388 births registered during the 52 weeks ending December 25th, the birth-rate being 28.9 per 1 000 of the population. This rate is the same as for 1907, and is the lowest on record for South Shields.

Births.	Males.	Females.	Totals.
Legitimate	1,673	1,598	3,271
Illegitimate.....	52	65	117
Total	1,725	1,663	3,388

The proportion of male to female births was 1,037 to 1,000. The percentage of illegitimate births was 3.5, which was also the percentage for 1908.

The number of births in each Ward is given on page 55.

Deaths.—1,779 deaths occurred during the year, a number equivalent to a death-rate of 15.1 per 1,000 of the population.

This death rate is considerably below 15.5 per 1,000, the death rate for the previous year. For no other year has the death rate ever been below 16 per 1,000. In spite of this great improvement, our death rate is higher than the average for the 76 great towns. Of these 76 great towns, 44 have a lower death rate than ours.

The following shows the deaths and death rate for each quarter of the year :—

	No. of Deaths.	Death-rate.
First Quarter	495	16.8
Second Quarter	447	15.2
Third Quarter	377	12.8
Fourth Quarter	460	15.6

Of the total deaths, 937 were males and 842 were females, the proportion of male to female deaths being 1,113 to 1,000.

Included in the total number of deaths are 177 which occurred in the Union Workhouse, Harton, and 8 in the County Asylum, Sedgefield, among persons who belonged to the Borough. Three deaths in the Ingham Infirmary, South Shields, of persons belonging to other districts have been excluded from our returns, and the particulars relating to the deaths have been notified to the Medical Officers of Health of those districts.

Deaths in Public Institutions.—In addition to the 185 deaths mentioned above, 85 deaths occurred in public institutions in the Borough, viz. :—74 in the Ingham Infirmary, and 11 in the Denes Fever Hospital, making a total of 270, which is 15 per cent. of all the deaths during the year. For the year 1908, the percentage was also 15.

Coroners' Inquests were held regarding 107 deaths, the proportion of inquest cases to the total number of deaths during the year being 6.0 per cent. Seventy-two of these deaths were due to various forms of Violence. (See Table I., page 49).

Uncertified Deaths.—During 1909, there were 64 deaths, the causes of which were not certified by the Coroner or by medical men, equivalent to 3.6 per cent. of the total number of deaths. Of

these deaths, 40 occurred under one year of age, and five more from 1 to 5 years. In Gateshead alone is this percentage of uncertified deaths exceeded. I have found no reason to change the opinion which I expressed in my Annual Report for 1908, that an increase in the number of inquests is desirable to remedy this unsatisfactory condition.

Infantile Mortality.—The number of deaths under one year of age was 468, which corresponds to an **Infantile Mortality Rate** of 138 per 1,000 births. Among illegitimate children the infantile mortality rate was 274 per 1,000 births. As in the country in general, this rate is twice as high among illegitimate as among legitimate children.

The following Table gives the Infantile Mortality during 1909 in the various Wards of the town :—

WARD.	No. of Births.	No. of Deaths under one year.	Infantile Mortality Rate per 1,000 Births.
Shields	215	43	200
Simonside	251	46	183
St. Hilda	160	27	169
Holborn	201	34	169
Rekendyke	290	45	155
Hadrian	188	28	149
Laygate	253	37	146
Victoria	339	46	136
Bents	135	18	133
Tyne Dock	283	34	120
Deans	385	46	119
Beacon	268	31	116
Weston	163	16	98
West Park	257	17	66
Whole Borough	3,388	468	138

Zymotic Diseases.—The seven principal Zymotic Diseases caused 159 deaths, viz. :—Diarrhoea, 42 ; Measles, 38 ; Whooping Cough, 36 ; Diphtheria, 20 ; Scarlet Fever, 19 ; “Fever,” 4 ; and Small-pox, 0. The death rate from these diseases was 1.35 per 1,000 of the population, as compared with 1.74 for the year 1908. The following Table gives the death rate (per 1,000 of the population) for each of the principal Zymotic Diseases since 1891 :—

YEAR.	Smallpox.	Scarlet Fever.	"Fever."	Diphtheria and Membranous Group.	Measles.	Whooping Cough.	Diarrhea.	Total Zymotic Rate.
1891 .....	..	.11	.20	.29	.90	.61	.73	2.85
1892 .....	.01	.12	.20	.10	.30	.33	.56	1.62
1893 .....	.04	.38	.35	.06	.39	.36	1.56	3.15
1894 .....	..	.39	.20	.05	.19	.11	.43	1.37
1895 .....	..	.18	.35	.21	.29	.90	1.43	3.36
1896 .....	..	.18	.27	.10	.92	.42	.58	2.49
1897 .....	..	.15	.16	.09	.29	.25	.88	1.83
1898 .....	..	.25	.39	..	.57	.77	1.11	3.09
1899 .....	..	.21	.47	.06	.04	.13	1.41	2.33
1900 .....	..	.21	.20	.12	.55	.67	.55	2.32
Mean 1891-1900	.00	.22	.28	.11	.44	.46	.93	2.45
1901 .....	..	.60	.22	.11	.68	.10	1.60	3.36
1902 .....	.01	.38	.06	.06	.92	1.01	.16	2.63
1903 .....	.01	.11	.10	.15	.14	.03	.47	1.02
1904 .....	.07	.07	.08	.11	.26	.59	.58	1.77
1905 .....	.04	.05	.21	.22	.22	.58	.54	1.86
1906 .....	..	.05	.08	.27	.98	.35	.95	2.68
1907 .....	..	.08	.04	.17	.43	.48	.18	1.37
1908 .....	..	.08	.07	.20	.28	.42	.69	1.74
1909 .....	..	.16	.03	.17	.32	.31	.36	1.35

The Tables below compare South Shields with the towns and the country generally:—

	Annual Rate per 1,000 of the Population.										Deaths under one year of age per 1,000 Births
	Birth.	Death.	Principal Epidemic Diseases	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	"Fever."	Diarrhea.	
England & Wales	25.6	14.5	1.12	0.00	0.35	0.09	0.14	0.20	0.06	0.23	109
76 Great Towns ..	25.7	14.7	1.42	0.00	0.48	0.11	0.15	0.24	0.06	0.38	118
143 Smaller Towns	24.8	13.9	1.03	..	0.33	0.09	0.16	0.17	0.06	0.27	111
England & Wales less the 219 Towns	25.6	14.5	0.80	0.00	0.21	0.66	0.14	0.16	0.06	0.17	98
Durham Administrative County ..	35.5	15.7	1.61	..	0.37	0.09	0.17	0.25	0.12	0.59	124
SOUTH SHIELDS	28.9	15.1	1.35	..	0.32	0.16	0.17	0.31	0.03	0.36	138

Year.	SOUTH SHIELDS.				ENGLAND AND WALES.			
	Annual Rate per 1,000 of the Population.			Infantile Mortality Rate per 1,000 Births.	Annual Rate per 1,000 of the Population.			Infantile Mortality Rate per 1,000 Births.
	Birth.	Death.	Zymotic		Birth.	Death.	Zymotic	
1900 ..	36.3	21.4	2.33	160	28.7	18.2	2.00	154
1901 ..	36.8	20.6	3.36	169	28.5	16.9	2.05	151
1902 ..	36.4	19.4	2.62	149	28.5	16.2	1.64	133
1903 ..	34.5	17.1	1.01	132	28.4	15.4	1.46	132
1904 ..	34.5	18.1	1.77	144	27.9	16.2	1.94	145
1905 ..	32.0	16.2	1.86	145	27.2	15.2	1.52	128
1906 ..	31.7	17.9	2.68	150	27.1	15.4	1.73	132
1907 ..	28.9	16.7	1.37	133	26.3	15.0	1.26	118
1908 ..	30.1	15.5	1.74	133	26.5	14.7	1.29	121
1909 ..	28.9	15.1	1.35	138	25.6	14.5	1.12	109

From these Tables it may be seen that South Shields did not share in the great improvement in the Infantile Mortality Rate which took place last year in the country in general.

INFECTIOUS DISEASES.

TABLE showing the number of **notifications** of the Notifiable Diseases, and the **deaths** therefrom, during 1909 :—

Diseases.	Cases Notified.	Deaths Registered.
Smallpox .....	..	..
Scarlet Fever	494	19
Diphtheria (including Mem- branous Croup	93	20
Typhus Fever .....	..	..
Enteric (or Typhoid) Fever ..	30	4
Continued Fever .....	..	..
Relapsing Fever .....	..	..
Puerperal Fever	4	3
Cholera .....	..	..
Erysipelas	89	3*
Plague .....	..	..
Totals for 1909	710	49
Totals for 1908	561	44

* Including one in the Union Workhouse, Harton.

The following Table shows the number of **cases** of Infectious Disease notified during 1909, and the **months** in which they occurred :

1909.	Smallpox.	Scarlet Fever.	Diphtheria and Membranous Croup.	Typhus Fever.	Enteric Fever.	Continued Fever.	Relapsing Fever.	Puerperal Fever.	Cholera.	Erysipelas.	Plague.	Totals.
January	22	9	..	1	..	..	..	..	3	..	35
February	18	9	..	1	..	..	..	..	3	..	31
March	39	8	..	4	..	..	1	..	5	..	57
April	38	6	..	3	..	..	1	..	3	..	51
May	42	12	..	4	..	..	..	..	6	..	64
June	55	4	..	3	..	..	1	..	9	..	72
July	33	2	..	4	..	..	..	..	7	..	46
August	34	7	..	4	..	..	1	..	7	..	53
September	40	3	..	2	..	..	..	..	12	..	57
October	52	12	..	2	..	..	..	..	9	..	75
November	77	14	..	1	..	..	..	..	12	..	104
December	44	7	..	1	..	..	..	..	13	..	65
Total for 1909	494	93	..	30	..	..	4	..	89	..	710
Total for 1908	292	128	..	39	..	..	5	..	97	..	561

The Infections Disease (Notification) Act, 1889, was brought into force within the Borough on May 1st, 1891. During the past eleven years the notifications have been as follows :—

Disease.	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
Smallpox	2	2	..	71	35	101	100	1	..	..	..
Plague .....	..	..	..	..	..	..	..	..	..	..	..
Cholera .....	..	..	..	..	..	..	..	..	..	..	..
Diphtheria & Mem- branous Croup ..	33	29	35	27	83	73	103	168	133	128	93
Erysipelas.....	86	80	79	98	110	99	117	104	64	97	89
Scarlet Fever	669	511	1263	834	378	278	227	217	325	292	494
Typhus Fever ....	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	175	71	115	66	58	59	84	54	48	39	30
Puerperal Fever ..	4	4	5	7	6	3	4	1	5	5	4
Continued and Re- lapsing Fevers ..	2	6	2	..	..	1	..	..	..	..	..
Chickenpox* ....	..	..	..	421	619	411	327	..	..	..	..
Totals	971	703	1499	1524	1289	1025	962	545	575	561	710

*This disease was made notifiable during the prevalence of Smallpox as a precautionary measure, but ceased to be notifiable in August, 1905.

Smallpox.—No cases of Smallpox were notified during the year. Thirty-eight persons who had been in contact with Smallpox in other districts were notified to the Health Department and kept under observation. None of them developed the disease.

Scarlet Fever.—The number of cases notified (494) is larger than in any year since the great outbreak in 1901 and 1902. For nearly half the year the Hospital was full, and cases had to be refused that would have benefitted by removal. Of the 494 cases notified, 67 per cent., *i.e.*, 333 cases were removed to Hospital. Nineteen deaths occurred, 9 in Hospital and 10 at home.

In one instance it was necessary to get a magistrates' order for the removal to Hospital of two children where the accommodation at home was insufficient for proper isolation, and the parents neglected to take necessary precautions to prevent the spread of the disease.

An outbreak of Scarlet Fever occurred in October among the children attending St. John's School, Winchester Street. Repeated visits were paid by me to the school, and I was able to discover five pupils attending school who had had undetected attacks of Scarlet Fever. On excluding these children the outbreak was brought to an end without school closure.

The following Table gives the Scarlet Fever Attack-, Death-, and Mortality-rates, together with the percentage of cases removed to the Hospital since 1892 :—

Year.	Population	Attack-rate per 1,000 Population.	Death-rate per 1,000 Population.	Mortality Rate per cent. of Cases.	Percentage of cases Removed to Hospital.
1892	80,530	4.8	.12	2.5	34
1893	82,284	7.4	.38	5.2	27
1894	84,077	8.4	.39	4.6	28
1895	85,910	4.4	.18	4.1	33
1896	87,785	5.4	.18	3.3	40
1897	89,699	7.1	.15	2.2	40
1898	91,656	6.9	.25	3.6	42
1899	93,657	7.1	.21	3.0	42
1900	95,703	5.3	.21	4.1	55
1901	97,800	12.5	.60	4.7	39
1902	103,330	8.0	.38	4.7	49
1903	105,325	3.6	.11	3.2	73
1904	107,334	2.9	.07	2.9	75
1905	109,360	2.1	.05	2.6	70
1906	111,402	1.9	.05	2.8	67
1907	113,460	2.9	.08	2.8	68
1908	115,535	2.5	.08	3.1	75
1909	117,627	4.2	.16	3.8	67

"Fever."—Thirty cases were notified as Typhoid Fever, and four deaths occurred from this disease during the year. No cases of Typhus, Relapsing, or Continued Fever were notified. The Borough is to be congratulated on its comparative freedom from these fevers. The "fever" attack-rate was 0.26, and the death-rate 0.03 per 1,000 of the population. Twenty-one of the cases notified were removed to Hospital. Of the cases treated in Hospital one died. Among the nine cases treated at home there were three deaths. In the month of May a case of Typhoid Fever was reported to me which had recently been brought from a ship to a house in the Borough. I immediately reported the matter to the Medical Officer of the Tyne Port Sanitary Authority. The captain of the ship was summoned before the magistrates for omitting to notify this case of illness on the arrival of the ship. Though the magistrates refused to convict on the ground that, in their opinion, the captain was unaware of this illness, they stated that it was a proper case to bring before them. This is an important matter, particularly for South Shields, and the energetic action of the Port Medical Officer should prevent such cases in the future.

On the occurrence of some cases of Typhus Fever in Newcastle. I addressed a circular letter to all the medical men practising in South Shields, as mild cases of this disease are sometimes overlooked on account of its rarity.

Diphtheria (including Membranous Croup).—The number of notified cases of this disease was 93, compared with 128 for the previous year, corresponding to an attack-rate of 0.79 per 1,000 of the population. Twenty deaths occurred, equivalent to a death-rate of 0.17 per 1,000 of the population. The case mortality is very high. Hospital accommodation is greatly needed for this disease.

Puerperal Fever.—Four cases of this disease occurred during the year, and three deaths were registered. Three of these cases, two of which were fatal, were attended by midwives. In each case precautions were taken to prevent the spread of the disease, and no secondary cases occurred.

Erysipelas.—Eighty-nine cases of Erysipelas were notified during the year, and three deaths occurred from this disease.

Cholera and Plague.—No cases of these diseases were notified during the year. Repeated visits were paid to the addresses of 106 persons coming from ports infected with Cholera.

Diarrhoea.—The weather during the summer of 1909 was cold and damp, and the mortality from Diarrhoea was lower than in the previous year. Forty-two deaths occurred, corresponding to a death rate of 0.36 per 1,000 of the population. The numbers of these deaths for the first, second, third, and fourth quarters of the year were 0, 4, 18, and 20 respectively. Thirty of the 42 deaths were of infants under one year of age. Twenty-four other deaths were due to allied diseases, of which 11 were under one year of age, and four from one to two years old.

Measles caused 38 deaths, giving a death-rate of 0.32 per 1,000 of the population. The Wards in which these deaths occurred, and the ages at death may be seen in Tables I. and II. The deaths occurred during the spring and summer months. (See Table III.) Below is a list showing the dates on which certain classes of the public elementary schools were closed on account of Measles :—

School.	Classes Closed.	Date of Closing.
Simonside	Whole Infants' Department & Standard I.	February 15th.
Laygate Infants'	Classes 8, 9, and 10	April 26th.
	Classes 6 and 7	May 14th.
West Harton Infants'	Whole Department	" "
*Barnes Infants'	Classes 4, 5, 6, 7, and 8	" "
Holy Trinity Infants'	Classes 5, 6, 7, and 8	" "
Stanhope Road Infants'	Class 9	" 15th
	Classes 9, 10, 11, and 12	June 9th.
Westoe Infants'	Class 10	May 18th.
	Class 6	" 28th.
	Class 7	June 14th.
	Class 9	" 30th.
‡Gilbert Street Infants'	All	May 18th.
Mortimer Rd. Infants' ..	All	" 26th.
Baring Street Infants'	Classes 7, 8, and 9	June 2nd.
St. Stephens' Infants'	Class 4	" 9th.
St. Hilda Infants'	Class 4	" 14th.

* Measles and Whooping Cough.

‡ Measles, Whooping Cough and Scarlet Fever.

Whooping Cough caused 36 deaths, equivalent to a death rate of 0.31 per 1,000 of the population. On account of this disease Classes 8 and 9 of the Westoe Infants' School were closed on April 23rd. (Also see Table under Measles above).

Tuberculosis.—There were 198 deaths from Tuberculosis during 1909, as follows :—

Pulmonary Tuberculosis (Tuberculous Phthisis)	96
" " Phthisis " (not otherwise defined)	34
Tuberculous Meningitis	26
Tuberculous Peritonitis	22
" Tabes Mesenterica "	1
Tuberculosis of other Organs	4
General Tuberculosis	15

The death rate from Tuberculosis for 1909 was 1.68 per 1,000 of the population, as compared with 1.81 for the previous year. Sixty-six bundles of bedding and 29 rooms were disinfected during the year by the staff of the Health Department in connection with the enquiries which are made whenever a death occurs from Tuberculosis of the Lungs.

The Public Health (Tuberculosis) Regulations, 1908, came into force on the first of January, 1909. These Regulations provide for the notification to the Medical Officer of Health of cases of Pulmonary Tuberculosis occurring among the inmates of Poor Law Institutions, or among persons under the care of District Medical Officers. One hundred and forty-nine such notifications were received during the year, referring to 104 persons, 72 of whom were males, and 32 females. Thirty-five of the 149 notifications were of persons from Common Lodging Houses or Seamen's Lodging Houses. Of these 104 persons, of whom 40 died during the year, 54 were under treatment in the Workhouse Infirmary, and 50 at addresses outside. Cases treated outside the Workhouse were visited by the Health Visitor, and instructions were given to the patients and friends with a view to preventing the spread of the disease. Disinfection was advised, and in 14 cases carried out by the help of the staff of the Health Department. A small number of cases of Pulmonary Tuberculosis were notified by medical men in the town. Visits were paid, and advice and help were given in the same way as with the Poor Law cases.*

In connection with these Regulations the Medical Officer of the Local Government Board has issued an important Memorandum on Administrative Measures against Tuberculosis. He lays stress on the importance of disinfection and of training the patient in the method of life suitable to the disease. "Tuberculosis is not only preventable, but the vast majority of cases attacked by it recover. The disease is declining under the influence of improved sanitation, and higher social welfare. Diminution of overcrowding has diminished infection and increased the resistance to it. An exaggerated fear of infection in Pulmonary Tuberculosis is unnecessary, but it is of importance not only to teach hygiene in the schools as an aid in the fight against Tuberculosis, but also to carry on an active propagandism outside school life to teach the essentials of the prevention of Tuberculosis and bring the pressure of public opinion to bear against indiscriminate expectoration, and against overcrowding and other evils of housing and occupation.

Early diagnosis of the disease is important, and more effective preventive measures could be taken were every encouragement given for the systematic treatment of "persistent colds," repeated attacks of "Bronchitis," and the like, which may indicate an early attack of Pulmonary Tuberculosis. When the disease is detected the active co operation of the patient and his household must at once be obtained, both in his own interest and for the sake of the public health. The assistance of the staff of the Health Department should be invoked in every suitable case. The cure and the care of the individual patient are the most effective means of avoiding further cases."

Dr. Newsholme further remarks :—"The chief means for the prevention of infection in Tuberculosis is the prevention of indiscriminate expectoration. For this purpose sanitary authorities having the necessary powers may advantageously make byelaws prohibiting spitting in public carriages, halls, waiting-rooms, or places of public entertainment; and the enforcement of such byelaws, and the exhibition of notices warning against expectoration have a most beneficial influence."

Attention is also drawn in the Memorandum to the advantages of a course of treatment and training in the necessary precautionary measures at a sanatorium; a well organised Tuberculosis Dispensary is a valuable aid, especially in a large town, as visitors attached to it can see the cases at their homes. For advanced cases where infection is greatest institutional treatment for example in Poor Law Infirmarys has great advantages.

"The number of cases of Tuberculosis at any one time, so far as the disease is derived from other human cases of the disease, must depend on the total number of similar cases from which the infection of Tuberculosis can be derived, and on whether the dosage of infection suffices under the conditions of its recipients to produce disease. Evidently then the occurrence of future cases of Tuberculosis, even though these measures are not adopted early in each case can be prevented in the proportion of the extent to which measures are adopted for preventing the patient from scattering the infection by cough and expectoration, and for keeping the patient separate from those susceptible to infection."

It is too early to expect the effect of these new Regulations to show itself by a lowering of the death rate from Phthisis, but I confidently expect that this will be the case. The Local Government Board expressly provide "that nothing in the Regulations shall have effect so as to apply or to authorise anyone to put in force with respect to a person in relation to whom a notification has been made any enactment which renders him or any other person liable to a penalty or subjects him to any restriction, prohibition, or disability affecting him or his employment, occupation, means of livelihood, or residence on the ground of his suffering from Pulmonary Tuberculosis." The action taken in consequence of these notifications last year has been well received by the patients who have been grateful for the advice offered and the help given.

Bacteriological Laboratory.—Thirty-three specimens were examined during the year, including 21 for Diphtheria, and 7 for Typhoid Fever.

THE BOROUGH HOSPITALS FOR INFECTIOUS DISEASES.

DENES FEVER HOSPITAL.

The following Table shows the number of patients admitted to and discharged from the **Denes Fever Hospital** during 1909 :—

Notified Disease.	Remaining in on Dec. 31st, 1908.	Admitted during 1909.	Total Number Treated during 1909.	Discharged during 1909.	Died during 1909.	Remaining in on Dec. 31st, 1909.	Mortality per cent of total number of Discharges and Deaths.
Scarlet Fever	17	333	350	306	9	35	2.9
Enteric Fever	4	21	25	23	1	1	4.2
Cerebro-Spinal Meningitis ..	..	1	1	..	1	..	..
Totals	21	355	376	329	11	36	3.2

The following Table gives the average number of patients in Hospital for each month of the year :—

Notified Disease.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Whole Year.
Scarlet Fever	17.0	18.2	28.0	48.9	45.6	49.3	43.7	31.2	38.6	44.4	51.6	51.5	39.0
Enteric Fever	3.0	1.1	1.4	0.3	1.0	1.5	3.2	4.2	1.3	1.9	1.3	1.0	1.8
Cerebro-Spinal Meningitis..	..	..	..	..	..	..	..	0.8	1.0	1.0	..	..	0.2
All Diseases	20.0	19.2	29.3	49.2	46.6	50.8	46.8	36.3	40.9	47.3	53.0	52.5	41.1

Scarlet Fever—The largest number of patients in Hospital at one time was 63 on December 1st and 8th ; the smallest number was 12 on four days in January. The average duration of stay in Hospital (excluding fatal cases) was 45.4 days. Nine deaths occurred after a stay in Hospital of 2, 4, 4, 6, 6, 15, 23, 39, and 45 days respectively.

DENES HOSPITAL.—The Hospital was first opened for the reception of patients in May, 1883, and the number of cases admitted year by year, since that date, is as follows:—

DISEASE.	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
Smallpox	12	22	5	3	3	2	..	..	..	8	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	23	8	100	120	212	60	23	43	118	134	164	199	126	195	259	266	284	282	486	409	277	209	161	147	220	219	333
Enteric Fever	7	16	9	11	9	6	15	35	17	8	42	26	66	65	47	107	114	44	66	35	29	29	59	35	37	32	21
Diphtheria .....	..	..	2	..	1	1	2	3	1	1	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..
Typhus Fever	3	16	3	..	..	2	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases	6	4	7	3	19	2	4	7	3	3	2	2	2	1	1	2	..	1	4	..	..	..	4	5	2	3	1
TOTALS.....	51	66	126	137	244	73	44	89	139	156	214	227	194	261	307	375	399	328	556	444	306	238	224	187	259	254	355

Typhoid Fever.—The maximum number of patients under treatment at one time was five in July and August. For 52 days during the year no Typhoid Fever patients were under treatment. One death occurred four days after admission. The average duration of stay in Hospital of the remaining cases was 28.8 days.

Cerebro-spinal Fever.—One case of Cerebro spinal Fever was admitted from the Ingham Infirmary. This patient died after a stay of 86 days in Hospital. There is only one bed available for cases of this kind, and in consequence a second case which occurred in the town about the same time had to be refused admission. I thought it advisable to address a circular letter to all the medical men in the town to call their attention to this disease. Fortunately, the disease never became epidemic.

New Infectious Diseases Hospital.—At two periods of the year the accommodation for Scarlet Fever at the Dences Hospital was inadequate. Further accommodation is needed so that we may be able to isolate and treat Diphtheria as well as such rarer diseases as Cholera, Typhus, Plague, and Cerebro-spinal Meningitis to which the town is liable at any time. I regret that no steps were taken during the year to provide the new Hospital for which so admirable a site has been purchased.

WHITELEAS SMALLPOX HOSPITAL.

The following Table shows the number of cases treated in the Whiteleas Smallpox Hospital :—

DISEASE.	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
Smallpox	51	14	22	12	3	9	3	2	..	71	37	103	101	2	..	..	1

No case of Smallpox was notified during the year in the Borough ; but one case was treated for, and at the expense of the Tyne Port Sanitary Authority, whose Floating Hospital was required at that time for patients suffering from another disease.

Joint Smallpox Hospital Scheme.—Progress has been made with the scheme to join with the North-East Durham Joint Smallpox Hospital Board. A meeting was held in October at which the Health Committee met members of the existing Joint Board, and conditions of amalgamation were discussed and agreed to. In my opinion this is a step which will not only save expense to the districts involved, but will also be for the good of the public health.

GENERAL.

Nuisances, etc.—During the year, 484 preliminary notices were served on owners with regard to 768 nuisances, and 524 preliminary notices were served on occupiers respecting 296 nuisances. Particulars of the nuisances will be found in Table A., pages 32 and 33. It was necessary to serve 31 statutory notices on owners regarding 50 nuisances, and one statutory notice on an occupier. No proceedings were taken before the magistrates for the abatement of nuisances.

Back Lanes.—The condition of the back lanes and the system of refuse disposal remains as mentioned in my reports of previous years.

Public Health Acts Amendment Act, 1907.—The following sections of this Act have been adopted in South Shields :—

Section 24—Height and Structure of chimneys.

„ 34—Extension of power of the Council to enter premises and examine drains.

„ 35—Extension of the definition of nuisance to any
(1) Cistern liable to be contaminated, (2) Gutters and drains causing dampness to buildings,
(3) Deposit of material causing dampness.

„ 36—Rainwater pipes not to be used as soilpipes.

„ 37—Water or Stack-pipes not to be used as Ventilating Shafts.

„ 47—Power to provide public conveniences under street.

„ 49—Summary power to provide sinks and drains for buildings.

„ 56—Filthy and dangerous articles to be purified.

„ 57—Child suffering from Infectious Disease not to attend School.

„ 59—Provision as to Library Books. This section prohibits the (1) taking, (2) use, or (3) return of Library Books by a person who is suffering from an Infectious Disease.

Section 60—Local Authority may pay expenses in Hospital of person who is not a pauper.

- „ 61—Removal of person from infected premises and the provision of houses or shelters temporarily.
- „ 62—As to exposure of infected person or things.
- „ 65—Extends the power of removal to Hospital to all persons suffering from any dangerous infectious disease who cannot be effectually isolated.
- „ 66—Cleansing and disinfection of premises.
- „ 67—Provision of nursing attendance by Local Authority
- „ 68—Wake not to be held over body of person dying of Infectious Disease.
- „ 69-75—Common Lodging Houses. May register for one year only.
- „ 95—Enabling the Corporation to appropriate any lands acquired by them and not required for the purposes for which those lands had been acquired, for any purpose approved by Local Government Board, subject to any special condition affecting such lands, and subject to the qualifications set forth in the section.

Section 51, giving power to declare a trade to be an “offensive trade” under Section 112 of the Public Health Act, 1875, was, in the first place, approved in Committee, but referred back by the Council, and afterwards not recommended for adoption. I consider this is to be regretted, as the possession of the powers thus conferred merely simplifies procedure and can give rise to no hardship or injustice. In the case of a gut-scrapers, mentioned in my report last year, had this section been in force, time would have been saved, and considerable annoyance to the neighbours would have been prevented.

Section 39, giving power to require water-closets in new and existing buildings, was referred to a joint meeting of the Health and Town Improvement Committees, who resolved not to adopt it. A letter was received from the Local Government Board in October, enquiring whether the Town Council could not secure the provision of water-closets in all new buildings, and drawing attention to the powers given under Sections 39 to 42 of this Act. Following on this letter, the Health Committee recommended

the Council to adopt Sub-sections (1) and (2) of Section 39, but the Council referred the matter to a joint meeting of the Health and Town Improvement Committees, who have since resolved not to adopt the section.

Housing of the Working Classes Acts. —As mentioned in my last Annual Report (pages 25 and 26) closing orders were obtained during the months of January and February for various houses, in accordance with resolutions of the Health Committee in 1908. Of the property reported on last year, and closed by the magistrates, repairs have been carried out satisfactorily at 2-8, Heron Street, and the closing order has been determined by the magistrates.

At 1-2, Queen Street, one room was closed voluntarily, and certain necessary repairs were carried out. In consequence no closing order was applied for.

The District Survey begun in 1908 has been continued in another quarter of the town. I hope soon to submit a report thereon to the Committee.

In addition, by arrangement with the owners, and without official representation by myself, the following premises have been closed :—

2-4, Tyne Street, 4 rooms. There being no w.c. and no yard, the owner decided to close rather than go to the expense of providing these.

14, Market Place. One out-shot room which could not reasonably be made fit for habitation.

5, Park Street. 2 out-shot rooms.

7, Park Street. One lower room ; damp, dark.

17½, East Street. 8 rooms.

— North Lane (top house). One room was given up so as to secure privacy for the w.c. ; this room also serves as a wash-house.

19, Long Row. This house of 6 rooms was struck off the register of Common Lodging Houses by the magistrates, and has since remained closed.

Common Lodging Houses.—121 visits were paid by the Inspectors of Nuisances to these houses, which were generally found in a satisfactory condition. Notices were served in connection with 6 nuisances. At the end of the year there were 26 houses on the register having accommodation for 9·5 lodgers. At two of the houses there is accommodation for both men and women. In two instances lodging-house keepers were convicted of offence, and fined; their licences were cancelled. These houses are also supervised by the Police, who paid 1,112 visits to them.

Seamen's Lodging Houses.—There were on the register at the end of the year 68 houses with accommodation for 701 seamen. The Inspectors of Nuisances paid 490 visits to these houses, and the Police paid 1,070. Notices were served regarding 5 nuisances. Two persons were prosecuted by the Police for keeping unlicensed Seamen's Lodging Houses. The German Sailors' Home, which was opened at the end of the year at the Mill Dam, affords accommodation for 47 seamen.

Houses-Let-in-Lodgings.—There are 13 houses on the register. These houses are occupied by a nomad population of the poorest class. Their migratory habits render inspection difficult and ineffective.

Factory and Workshop Acts.—Particulars of inspections and defects found during 1909 in connection with the factories, workshops etc., in the Borough are given in the Home Office Table on pages 25 and 26. As many small employers are unaware of their duty to send at the beginning of February and August of each year to the District Council a list of all out-workers employed by them, I requested the Council to issue an advertisement calling attention to this duty. The advertisement was issued at the end of the year, but no lists have been received in consequence of it.

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1.—INSPECTION.

Premises.	Number of		
	Inspections.	Written Notices	Prosecutions.
Factories (Including Factory Laundries)	70	2	.
Workshops (Including Workshop Laundries)	330	14	...
Workplaces (Other than Outworkers' premises in- cluded in Part 3 of this Table)	162	1	...
Total	562	17	...

2.—DEFECTS FOUND.

Particulars.	Number of Defects				Number of Prosecutions.
	Found.	Remedied	Receiving Attention	Referred to H.M. Inspector.	
<i>* Nuisances under the Public Health Acts :—</i>					
Want of cleanliness	15	13	2	...	...
Want of ventilation	1	...	1	...	...
Overcrowding.....	...	...	...	...	...
Want of drainage of floors .....	...	...	...	...	...
Other nuisances.....	5	2	3	...	...
<i>† Sanitary accommodation—</i>					
Insufficient	1	1	...	...	...
Unsuitable or defective	8	6	1	1	...
Not separate for sexes.....	...	...	...	...	...
<i>Offences under the Factory and Workshop Act :—</i>					
Illegal occupation of underground bakehouse (s. 101).....	...	...	...	...	...
Breach of special sanitary require- ments for bakehouses (s. 97 to 100) .....	...	...	...	...	...
Other offences .....	...	...	...	...	...
(Excluding offences relating to out- work which are included in Part 3 of this Table)					
Total	30	22	7	1	...

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act as remediable under the Public Health Acts.

† Section 22 of the Public Health Acts Amendment Act, 1890, is in force. The alterations and improvements carried out during the year with regard to sanitary accommodation have been in accordance with the Sanitary Accommodation Order of 4th February, 1903

3.—HOMWORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.									
	Lists received from Employers.					Addresses of Outworkers.				
	Sending twice in the year.		Sending once in the year.		Outworkers.	Prosecutions.				Inspection of Outworkers' premises.
	Lists.	Con-tractors.	Work-men.	Lists.	Con-tractors.	Work-men.	Prosecutions.	Prosecutions.	Prosecutions.	
Wearing Apparel—										
(1) Making, etc.	2	..	8	1	..	1	..	..	..	17
(2) Cleaning and washing	..	..	..	..	..	..	..	..	..	..
Other work	..	..	..	..	..	..	..	..	..	..
TOTAL.....	2	..	8	1	..	1	..	..	..	17

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.		Class.	Number.
Making of Wearing Apparel	Matters notified to H.M. Inspector of Factories:—	..
Bakehouses	Failure to affix Abstract of the Factory and Workshop Act (s. 133)	6
Joinery	Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5):—	13
Cabinet-making	Outstanding at end of 1908, and since attended to	17
Others	Notified by H.M. Inspector	2
			Reports (of action taken) sent to H.M. Inspector	..
			Receiving attention at end of year	..
			Other..	..
			Underground Bakehouses (s. 101):—	..
			Certificates granted during the year	..
			In use at the end of the year	1
Total number of workshops on Register..		255

OTHER MATTERS.

Tyne Dock Mortuary.—Complaints were made of the unsatisfactory position of the mortuary on the staithes at Tyne Dock. Though the matter was discussed, I regret that I have to report that steps were not taken to force those responsible for the present position of the mortuary to remedy this nuisance.

Water Supply.—During the year 100 samples of water from the public supply were examined by Sir Rubert Boyce, Holt Professor of Pathology in the University of Liverpool. Sir Rubert Boyce's report is now in the hands of the Parliamentary Committee.

Food Inspection.—One hundred and fifty samples were taken during the year, and submitted to the Borough Analyst. Details of the samples taken, and the action which followed are given in Table G, page 39. Fourteen samples were taken informally. Twelve samples of milk taken in course of delivery at the railway station were all genuine. Particulars of the amount of food condemned during the year will be found in Table H., page 40.

Public Slaughterhouse.—All slaughtering in the Borough is done in the Public Slaughterhouse. The number of animals slaughtered during the year was:—Beasts, 4,444 ; Calves, 564 ; Pigs, 6,465 ; Sheep, 36,450 ; total, 47,923 animals. The following were condemned at the Slaughterhouse as unfit for human food :—

Beasts : 39 carcasses and parts of 48 carcasses.

Calf : 1 carcass.

Sheep : 14 carcasses, and parts of 10 carcasses .

Lambs : 3 carcasses.

Pigs : 3 carcasses.

Particulars of these carcasses are included in Table H. above mentioned. No proceedings were taken before the magistrates on account of unsound meat.

Triperies and Gut-Scraping Places.—There are four tripe-preparers in the Borough, one of whom carries on business at the Public Slaughterhouse. At the end of the year there were four gut-scrapers, three of whom worked at the Slaughterhouse.

Cowsheds, Dairies, Milkshops, Ice-Cream Shops and Fried Fish Shops—These have been regularly inspected during the year. There are about seventy fried fish shops in the Borough ; the number is constantly changing.

Midwives Act, 1902.—There are now 28 midwives on the South Shields register. Two midwives died during the year, and one had her name struck off the Roll in February owing to her neglecting to comply with the rules laid down by the Central Midwives Board. The names of two women trained as midwives have been added to the list.

During the year 199 visits were paid by the Inspector of Midwives to midwives at their homes ; their case books and appliances were examined, and on the whole found in a satisfactory condition. Instructions and advice were given where necessary. Thirty two visits were paid by midwives to the Inspector at the Health Office with regard to their work. In addition to the above, visits have been paid to 38 uncertified midwives, to whom advice was given with reference to cleanliness, and the precautions necessary in their work. Six uncertified midwives have called at the office to obtain information about the training now needed before registration. As yet none of these women have undergone training on account of the expense.

During the year, 1,136 births were attended by certified midwives, and 320 cases are known to have been attended by uncertified women. Two midwives attended more than 100 cases each, seven attended from 50 to 100 cases each, and seven attended less than 10 cases each.

After the 1st April, 1910, it will be unlawful for any woman, habitually, and for gain, to attend women in childbirth, otherwise than under the direction of a qualified medical practitioner, unless she be certified under the Midwives Act. At present the number of midwives practising in South Shields is sufficient, but as most of the women engaged here in this work are not young, and only two women have undergone training to practice in the town since the Act came into force in 1902, it seems likely that the number of midwives will diminish during the next few years.

Notifications have been received from midwives during 1909 in accordance with Rule E. 20, as follows :—

Still-births	39
Sending for medical help	40

The reasons given for sending for medical help were :—

Abnormal labour	18
Delicate or premature infants	16
Illness of mother	4
Raised temperature	2

40

Three cases of Puerperal Fever, where a midwife had been in attendance, were visited by the Inspector, who saw that necessary precautions were taken to prevent the spread of the disease. No secondary cases occurred.

Health Visitor.—The Health Visitor reports that during the year 2,072 visits were paid to houses where births had taken place, and advice was given to the mothers on the feeding and management of infants. Of the children visited 1,850 were breast-fed, 102 partly breast-fed, and 120 hand-fed.

The condition of the infants is shown below :—

	Breast-fed.	Mixed feeding.	Hand-fed.	Total.	Percentage Hand-fed.
Well-nourished	1424	32	26	1482	1·8
Fairly well nourished... ..	362	24	62	448	13·8
Ill-nourished	64	46	32	142	22·5

The following Table gives particulars of the feeding of the infants visited during the year :—

MONTH.	FEEDING.					Total.	Per-centage of Children Hand-fed.
	Breast fed.	Mixed feeding.	Hand-fed.				
			No.	Type of Bottle			
				Boat.	Tube.		
January ..	140	8	5	3	2	153	3.3
February ..	130	9	7	4	3	146	4.8
March	137	6	10	7	3	153	6.5
April	154	7	12	6	6	173	7.0
May	210	8	15	8	7	233	6.4
June	129	7	7	5	2	143	4.9
July	191	8	9	6	3	208	4.3
August	132	9	14	10	4	155	9.0
September ..	149	8	8	3	5	165	4.9
October ..	154	13	7	3	4	174	4.0
November..	182	7	14	9	5	203	6.9
December ..	142	12	12	8	4	166	7.2
TOTAL ..	1850	102	120	72	48	2072	5.8

Three hundred and twenty-eight re-visits were paid to children in delicate health, or to hand-fed babies. In some cases considerable improvement was noticed.

Thirty cases were visited where the mother had to leave her child in order to go to work. This number is higher than last year, probably owing to the depression in trade. Twenty of these infants were breast-fed, and eight hand-fed.

Eighty cases of still birth were enquired into. Thirty-nine of these cases were attended by certified midwives, 21 by unregistered women, and 20 by medical men. Forty-two of the still-births were premature.

Enquiries were made into the circumstances attending the deaths of 380 infants. Of these only 169 were breast-fed, 181 were hand-fed ; 30 lived only a few hours. Fifty cases of Infantile Diarrhoea were inquired into ; 18 were breast-fed, 27 hand-fed, and 5 partly hand-fed.

Forty nine cases of Phthisis were visited, and instructions were given as regards cleanliness, fresh air and care of the sputum.

SUMMARY OF THE MONTHLY REPORTS TO THE HEALTH
COMMITTEE DURING 1909, OF THE INSPECTORS OF
NUISANCES, AND THE INSPECTOR OF MEAT, FOOD
AND DRUGS, ETC.

	PAGE.
Table A.—Nuisances, &c., for which notices have been issued	32-33
B.—Structural Work carried out	34-36
C.—Visits of the Inspectors of Nuisances	37
D.—Cases removed to Hospital	38
E.—Disinfection of Premises, &c.	38
F.—Visits of Inspector of Meat, &c.	38
G.—Summary of Analyst's Reports on Samples taken under Food and Drugs Acts	39
H.—Food Condemned	40

TABLE A.—NUISANCES, &c., FOR THE ABATEMENT OF WHICH PRELIMINARY NOTICES HAVE BEEN ISSUED.

NUISANCE, ETC.	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	Totals.
Privy Midden	1	..	5	..	6
Privy: insufficient	2	..	3	1	6
dilapidated and defective .....	..	11	8	21	40
defective pail .....	..	..	1	..	1
absence of hatches, etc.	23	28	12	5	68
liquid flowing from	40	42	13	2	97
dirty	2	26	7	3	38
W.C.: choked	2	..	6	2	10
choked ("Fowler" type) .....	..	..	3	2	5
defective and insanitary ("Fowler" type) ..	1	..	..	1	2
obsolete	1	..	..	..	1
dilapidated ("trough") .....	..	..	..	1	1
untrapped ("trough") .....	..	..	1	..	1
foul basin .....	..	..	3	1	4
defective basin	3	..	7	..	10
defective soilpipe	6	..	..	..	6
insufficient flush	2	..	9	4	15
Urinal (Public House): insanitary	2	..	..	..	2
Drain: choked	17	8	21	39	85
defective	13	2	11	6	32
absence of	1	..	..	1	2
unventilated	2	..	..	..	2
defective trap .....	..	..	1	1	2
foul gully .....	..	..	1	1	2
defective gully	2	..	2	4	8
absence gully .....	..	..	3	..	3
absence gully grate	1	2	1	3	7
untrapped public gully .....	..	..	1	..	1
Wash-up: insanitary	2	..	3	4	9
defective .....	..	..	..	6	6
obsolete trap .....	..	2	..	..	2
untrapped wastepipe	24	28	19	37	108
defective	3	..	3	3	9
choked .....	..	1	..	..	1
absence hopper head .....	..	..	1	..	1
Lavatory: untrapped wastepipe	4	..	1	..	5
Bath:	5	..	1	..	6
Rainwater Cistern (Underground): foul	8	6	2	18	34
defective and dangerous .....	..	2	..	..	2
absence of pump .....	..	1	..	..	1
Stable: accumulation of manure .....	..	..	3	..	3
improperly constructed manure receptacle ..	..	2	..	..	2
defective w.c. basin .....	..	1	..	..	1
Yards and Areas: defective and unpaved	36	10	11	80	137
dirty	3	10	15	2	30
absence of back door sill	2	..	..	1	3
Outbuildings: dirty	1	24	7	3	35
dilapidated	1	4	1	7	13
Cellar: filthy .....	..	..	..	1	1

TABLE A.—CONTINUED.

NUISANCE, ETC.	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	Totals.
Dwelling : dirty rooms .....	..	2	1	3	6
unfit for human habitation.....	..	..	4	..	4
overcrowded .....	..	..	4	..	4
damp	1	1	3	1	6
defective window cords	1	..	2	..	3
defective roof	1	1	3	5	10
„ ceiling .....	..	1	..	..	1
„ walls .....	..	1	..	3	4
„ floor.....	1	2	..	3	6
unventilated floor	1	1	..	6	8
insufficient and choked spouting....	23	7	17	16	63
basement flooded.....	1	..	..	..	1
defective staircase walls .....	..	..	..	2	2
absence of water supply.....	5	3	5	2	15
Seamen's Lodging House : damp .....	..	..	..	1	1
defective wall .....	..	..	..	1	1
defective floor .....	..	..	..	1	1
defective spouting. etc. ....	..	..	..	1	1
cellar flooded.....	..	1	..	..	1
Common Lodging House : dirty .....	..	..	..	1	1
absence window cords .....	..	..	1	..	1
choked drain .....	..	..	1	..	1
defective w.c. cistern .....	..	..	1	..	1
filthy “trough” w.c. ....	..	..	1	..	1
keeping animals.....	..	..	1	..	1
House-Let-in-Lodgings : filthy privy .....	..	..	..	1	1
Factory : insufficient w.c. accommodation .....	..	..	1	..	1
unsuitable w.c. ....	..	..	1	..	1
Workshop : want of cleanliness	2	..	..	8	10
dirty w.c. basin .....	..	..	..	1	1
defective floor .....	..	..	..	1	1
„ wall .....	..	..	..	1	1
Workplace : defective yard.....	1	..	..	..	1
„ roof.....	1	..	..	..	1
„ spouting.....	1	..	..	..	1
Bakehouse : want of cleanliness	3	..	..	..	3
Other Nuisances : keeping animals	5	1	2	1	9
smoke nuisance	1	..	..	..	1
accumulation of refuse .....	..	7	4	7	18
depositing filth on public gully .....	..	..	..	2	2
keeping pigs contrary to Bye-laws	1	..	..	..	1
gutscreping on private premises .....	..	..	1	..	1
Totals	259	238	239	328	1064
Letters sent out	31	11	47	38	127
Notices re Middens in “Added Area” .....	..	15	..	..	15
Summary of Statutory Notices issued during the year :—					
Owners : number of notices.....	7	..	12	12	31
„ nuisances	17	..	13	20	50
Occupiers : number of notices.....	..	..	1	..	1
„ nuisances .....	..	..	1	..	1

TABLE B.—STRUCTURAL WORK CARRIED OUT DURING
THE YEAR 1909.

	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	Totals.
Privy Midden : abolished without any other form of convenience being substituted	1	..	..	..	1
repaired .....	..	1	..	..	1
Privy Receptacles : provided in lieu of privy middens (3)	1	1	..	1	3
additional provided .....	..	1	..	..	1
repaired .....	..	27	4	34	65
Ashpits : provided	1	..	1	..	2
cemented .....	..	..	1	..	1
Dustbins : (portable) provided .....	..	4	..	..	4
W.C.'s : "Fowler" closets abolished without any other form of convenience being substituted .....	..	..	1	..	1
pedestal wash-down provided in lieu of privy midden (1) .....	..	..	1	..	1
privy receptacles (8)	2	3	5	..	10
"Fowlers" (2) .....	..	..	2	..	2
additional provided	1	1	3	..	5
re-built .....	..	..	2	..	2
repaired .....	..	3	..	..	3
defective and obsolete basins replaced ..	13	1	18	1	33
new cisterns and flush pipes provided ..	5	..	..	..	5
cisterns repaired	1	..	6	3	10
flush pipes repaired .....	..	..	..	2	2
Drains : provided	19	5	1	1	26
relaid	11	..	15	8	34
repaired	3	3	26	7	39
abolished	1	..	8	..	9
soil-pipes renewed or repaired	7	..	3	..	10
ventilators provided .....	..	5	3	..	8
" repaired	3	..	..	..	3
inspection chambers provided	1	..	1	..	2
cooling " "	1	..	..	..	1
disconnecting " "	11	4	..	..	15
" traps provided	2	..	3	..	5
defective and obsolete gullies replaced ..	10	..	25	15	50
additional gullies provided	23	35	3	7	68
ball gully provided	1	..	..	..	1

TABLE B.—CONTINUED.

	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	Totals.
Wash-ups : provided (complete)	6	..	1	2	9
metal, replaced by earthenware....	..	9	2	16	27
waste-pipes trapped	43	45	8	36	132
" renewed or repaired ..	..	1	1	7	9
hopper heads provided	20	5	2	9	36
Lavatories : waste-pipes trapped	7	..	2	..	9
Baths : " "	6	1	1	..	8
Rainwater Cisterns : (underground) cleaned out	8	10	..	1	19
filled in ....	..	9	3	14	26
repaired .....	..	..	..	1	1
pumps repaired .....	..	4	..	..	4
covers renewed	1	1	..	..	2
abolished (wood tanks) ..	..	..	..	2	2
Stables : manure receptacle rebuilt .....	..	..	..	..	1
yard cemented .....	..	..	1	..	1
Yards and Areas : relaid with cement concrete	26	6	8	30	70
repaired	7	3	3	6	19
sills provided to doorways ..	2	..	..	..	2
Out-buildings : repaired	11	5	..	13	29
demolished .....	..	..	..	1	1
Wash-houses : built .....	..	..	3	..	3
repaired	6	..	..	17	23
floors relaid with cement concrete	12	..	3	27	42
floors repaired	5	..	..	..	5
Dwellings : site concreted and sub-soil drained..	1	..	..	..	1
ceilings renewed or repaired .....	..	..	3	..	3
roofs " "	10	..	4	4	18
" re-slatted .....	..	..	2	..	2
floors relaid or repaired with wood..	..	..	2	7	9
floor relaid with cement concrete	..	..	..	1	1
floors ventilated .....	..	1	2	8	11
staircase repaired .....	..	1	..	..	1
stairs renewed .....	..	..	..	1	1
gable cemented .....	..	..	1	..	1
" tarred .....	..	..	1	..	1
walls repaired or pointed .....	..	1	..	1	2
room walls repaired .....	..	..	..	12	12
" " cleaned .....	..	..	..	1	1
passages cemented or repaired .....	..	..	..	2	2
spouts, etc., repaired or renewed ..	14	7	31	12	64
down-comer disconnected from sewer	..	..	1	..	1
lighting and ventilation improved ..	..	..	4	..	4
window cords renewed .....	..	..	6	1	7
rooms closed (see also under Hous- ing of the Working Classes Acts).	..	..	24	..	24
obstructive building removed	..	..	..	1	1

TABLE B.—CONTINUED.

	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	Totals.
Seamen's Lodging Houses : w.c. re-built	1	1
defective and obsolete w.c. basins
replaced	3	3
w.c. cistern repaired	1	1
oilpipe and ventilator renewed	1	1
" provided	1	1
drains repaired	3	3
obsolete gully replaced	1	1
portable dust-bin provided	1	1
yard repaired	1	1
roofs	2	2
spouts, etc. renewed or repaired	4	4
walls re-pointed	1	1
room and passage walls repaired	5	5
floors repaired with wood	2	2
window frames repaired	2	2
ventilation improved	2	2
Common Lodging Houses : w.c. repaired	2	..	2
walls re-pointed	1	1
room and staircase walls repaired	3	3
window cords renewed	1	..	1
floor re-laid with wood	1	..	1
spout renewed	1	..	1
Factories : pedestal wash-down w.c.'s provided
in lieu of " trough " closet (1)	4	..	4
defective w.c. basin replaced	1	..	1
w.c. : lighting and ventilation im-	1	2	3
proved	1	2	4
w.c. : privacy secured	1	1	2	4
w.c. : floor cemented	1	1
urinal provided	1	..	1
" flush provided	1	..	1
privy repaired	1	1
Workshops : additional w.c. provided	1	..	1
urinal remodelled	1	..	..	1
drains provided	2	..	2
bakehouse lighting improved	1	..	1
Milkshop : pedestal wash down w.c. provided	1	1
drain provided	1	1

TABLE C.—SUMMARY OF VISITS OF THE INSPECTORS
OF NUISANCES.

	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	Totals.
On complaint of nuisance	87	87	82	66	322
To test drains	30	5	44	8	87
„ Seamen's Lodging Houses	1	290	16	183	490
„ Common Lodging Houses .....	..	24	40	57	121
„ Houses-Let-in-Lodgings	1	..	12	2	15
„ Factories	25	11	12	22	70
„ Workshops	106	21	13	150	290
„ Workplaces	65	..	16	1	82
„ Homeworkers' premises	2	..	..	15	17
On notification, disinfection after, or removal to Hospital of in- fectious disease	249	354	176	123	902
To supervise home-treated cases	307	137	16	86	546
Re Smallpox contacts	18	23	9	53	103
„ Cholera contacts	27	34	20	44	125
Other infectious disease contacts ..	2	2	2	1	7
Re Phthisis deaths	16	34	22	55	127
„ „ cases	1	5	11	27	44
„ School reported cases	245	523	120	466	1354
Visits of inspection	5107	4359	5322	3538	18326
„ with Board of Trade Investi- gator .....	..	26	..	..	26
To works in progress	1015	130	601	307	2053
Interviews and appointments .....	..	279	..	44	323
Taking samples with Food Inspector	120	..	..	..	120
TOTAL VISITS	7424	6344	6534	5248	25550

TABLE D.—CASES REMOVED TO HOSPITAL.

Notified Disease.	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	Totals.
Scarlet Fever.....	77	127	59	68	331
Enteric Fever	11	2	6	3	22
Cerebro-Spinal Meningitis .....	..	1	..	..	1
TOTALS	88	130	65	71	354

TABLE E.—DISINFECTION.

Disinfected.	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	Totals.
Rooms fumigated.....	169	195	91	111	566
Schoolrooms fumigated	12	34	5	9	60
Bundles of Bedding sent for disin- fection by steam	167	201	90	113	571

TABLE F.—SUMMARY OF VISITS OF THE INSPECTOR
OF MEAT, ETC., TO THE VARIOUS TRADES
UNDER HIS SUPERVISION.

Places Inspected.	Number Existing at end of year.	Number of Visits.
Meat and Fish Shops .....	..	3784
Fried Fish Shops	about 70	64
Bakehouses	42	40
Milkshops and Dairies	273	458
Cowsheds	6	49
Fish Curing Places	5	8
Triperies	3	8
Gut Scraping Place	1	..
TOTAL VISITS .....	..	4411

TABLE G.—SALE OF FOOD AND DRUGS ACTS

The following is a Summary of the Analysts' Reports on the Samples taken during the year 1909.

ARTICLE.	Number taken.	Number Genuine.	NON-GENUINE OR DOUBTFUL.		REMARKS.
			No.	Extent of Adulteration or Deficiency.	
Barley, Pearl	1	1	..	.....	..
Bread	1	1	..	.....	..
Butter.....	26	23	..	.....	..
Do. ....	..	..	2	Contained 0.27 per cent. Boric Acid ..	..
Do. ....	..	..	1	" 0.21 " " " ..	..
Camphorated Oil..	1	1	..	.....	..
Cheese.....	1	1	..	.....	..
Chicory	1	1	..	.....	..
Cocoa	1	1	..	.....	..
Do., mixed.....	1	..	1	Contained 30 per cent. of foreign Starch, chiefly Arrowroot, and 40 per cent. of Sugar; its colour heightened by the addition of a small amount of red, orange and blue artificial colouring matters.	..
Cream	3	..	1	Contained 0.40 per cent. Boric Acid ..	..
Do. ....	..	..	1	" 0.21 " " " ..	..
Do. ....	..	..	1	" 0.25 " " " ..	..
Dripping	2	1	1	Contained about 20 per cent. Cotton Seed Oil.	..
Gelatine	1	1	..	.....	..
Gregory Powder ..	1	1	..	.....	..
Lard	8	5	2	Contained at least 75 per cent. Cotton Seed Oil, and at least 10 per cent. Beef Stearine.	..
Do. ....	..	..	1	Do. do.	Fined 5/- and costs.
Liquorice Powder ..	1	1	..	.....	..
Margarine	5	1	..	.....	..
Do. ....	..	..	1	Contained 0.12 per cent. Boric Acid ..	..
Do. ....	..	..	1	" 0.10 " " " ..	..
Do. ....	..	..	1	" 0.14 " " " ..	..
Do. ....	..	..	1	" 0.24 " " " ..	..
Milk	67	60	..	.....	..
Do. ....	..	..	2	Deficient 6.6 per cent. natural fat ..	Letters of caution sent.
Do. ....	..	..	1	Deficient 25.0 per cent. natural fat, and deficient 2.9 per cent. non-fatty solids.	Fined 20/- and costs.
Do. ....	..	..	1	Deficient 13.3 per cent. natural fat, and deficient 9.2 per cent. non-fatty solids.	Fined 10/- and costs.
Do. ....	..	..	1	Deficient 9.2 per cent. non-fatty solids	Letter of caution sent.
Do. ....	..	..	1	" 4.9 " " " ..	Do.
Do. ....	..	..	1	" 6.6 " " " ..	Do.
Mustard	2	2	..	.....	..
Nitre, Sweet Spirit of..	1	..	1	Deficient 40.6 per cent. Ethyl Nitrite ..	Letter of caution sent
Oatmeal	1	..	1	Contained 10 per cent. Wheat Flour ..	..
Olive Oil.....	1	1	..	.....	..
Pepper	5	5	..	.....	..
Rice, Ground	2	2	..	.....	..
Rum	5	5	..	.....	..
Sauce	1	1	..	.....	..
Spices, Mixed	1	1	..	.....	..
Sweets.....	1	1	..	.....	..
Tapioca	1	1	..	.....	..
Vinegar	3	3	..	.....	..
Whisky	5	5	..	.....	..
TOTALS.....	150	126	24		

TABLE H.—FOOD CONDEMNED AND DESTROYED
DURING THE YEAR 1909.

		<i>At Slaughterhouse.</i>
Beasts	39	Carcases (38 Tuberculosis : 1 Acute Peritonitis and Pleurisy). 4 Forequarters (Tuberculosis ; 2 Beasts). 24 Sets of Lungs (21 Tuberculosis, 3 Pleurisy). 6 Sets of Livers and Lungs (2 Tuberculosis, 3 Abscesses, 1 Peritonitis and Pleurisy). 13 Livers (6 Tuberculosis, 6 Abscesses, 1 Ulcers.) 1 Liver and Stomach (Peritonitis). 2 Heads (Actinomycosis).
		<i>Outside of Slaughterhouse.</i>
		4 Quarters (Emaciated and " Stripped " ; 1 Beast). 2 Frozen Fore-quarters (Decomposition ; 2 Beasts). 1 Frozen Liver (Decomposition). 16 lbs. Frozen Kidneys (Decomposition).
		<i>At Slaughterhouse.</i>
Calf	1	Carcase (Tuberculosis).
		<i>Outside of Slaughterhouse.</i>
	40	lbs. Frozen Livers (Decomposition).
		<i>At Slaughterhouse.</i>
Sheep	14	Carcases (5 found dead, 3 Dropsy, 1 Ulcers, 1 Abscess and Emaciation, 1 Suffocated, 1 Gored, 1 Decomposition, and 1 Tuberculosis). 1 Frozen Carcase (Decomposition). 4 Forequarters (Pleurisy ; 2 Sheep). 4 Breast Half-quarters (Pleurisy ; 2 Sheep). 1 Side (Damaged). 5 Livers (Flukes).
		<i>Outside of Slaughterhouse.</i>
	40	lbs. Frozen Kidneys (Decomposition).
		<i>At Slaughterhouse.</i>
Lambs	3	Carcases (2 found dead, 1 Suffocation).
		<i>Outside of Slaughterhouse.</i>
	18	Heads (Decomposition).
		<i>At Slaughterhouse.</i>
Pigs	3	Carcases (1 Peritonitis, 2 found dead).
		<i>Outside of Slaughterhouse.</i>
	1	Carcase (found dead). 40 lbs. Frozen Kidneys (Decomposition). 47 Plucks (Decomposition). 80 lbs. Frozen Kidneys (Decomposition).
		<i>Outside of Slaughterhouse.</i>
Tripe (Frozen)	303	lbs. (Decomposition).
Fish	16	cwts. Mussels (Decomposition). 4 quarts Mussels (Decomposition). 2 stone Prawns (Decomposition). 6 quarts Shrimps (Decomposition).
Fruit	720	Melons (Decomposition). 3 quarts Plums (Decomposition). 70 lbs. Tomatoes (Decomposition).
Yeast	16	stone (Decomposition).

STATISTICAL TABLES.

	PAGE.
Table I.—Causes of Death, 1909, arranged according to the classification of the Registrar-General	42-49
Table II.—Deaths in Wards, 1909, (L.G.B. Table IV.)	50
Table III.—Deaths, 1909, classified according to Causes, Ages, and the Months in which they occurred	51
Table IV.—Vital Statistics for 1909 and previous years (L.G.B. Table I.)	52
Table V.—Birth-rates and Death-rates, 1871-1909	53
Table VI.—Infantile Mortality during 1909 (L.G.B. Table V.)	54
Table VII.—Infantile Mortality, 1909, in the various Wards	55
Table VIII.—Cases of Infectious Disease notified and removed to Hospital during 1909, classified according to Ward and Age (L.G.B. Table III.)	56
Table IX.—Comparative Rates of Sickness and Death from Notifiable Diseases, 1898 to 1909	57
Table X.—Summary of Meteorological Observations, 1909	58

TABLE I.—CONTINUED.

CAUSES OF DEATH.	All Ages.	AGES AT DEATH.													55 to 60 upwards.						
		0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1.	2.	3.	4.	Total under 5 years.	5.	10.	15.	20.		25.	35.	45.	55.	65.	75.
Lupus .....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	1	..
Tubercle of other Organs	4	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
General Tuberculosis	15	..	1	2	3	3	2	1	9	2	1	1	1	1	1	..	..	..	..	..	..
Scrophula .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Parasitic Diseases .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Starvation	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Scurvy .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	..	..	..
Alcoholism, Delirium Tremens	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Opium, Morphia-habit .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Industrial Poisoning :—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
By Lead .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
.. Phosphorus, &c. ....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
.. Arsenic and other Metals .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatic Fever, Acute Rheumatism ..	5	..	..	..	..	..	..	..	1	..	2	..	1	..	..	1	..	1	..	..	..
<i>Rheumatism of Heart</i> .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
Chronic Rheumatism	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Rheumatoid Arthritis, <i>Rheumatic Gout</i> .	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..
Gout	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Carcinoma	45	..	..	..	..	..	..	..	..	..	..	..	..	..	2	7	10	12	10	3	7
Sarcoma	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	2	..	..	1

TABLE I---CONTINUED.

CAUSES OF DEATH.	All Ages.	AGES AT DEATH.																	55 to 60
		0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1- 2-	3- 4-	Total under 5 years.	5- 10-	10- 15-	15- 20-	20- 25-	25- 35-	35- 45-	45- 55-	55- 65-	65- 75-	85 and upwards.	
Pericarditis.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hypertrophy of Heart .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angina Pectoris.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dilatation of Heart	3	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	1
Fatty Degeneration of Heart	10	..	..	..	..	..	..	..	..	..	..	..	2	3	2	3	..	2
Syncope, Heart Disease (not specified) ..	105	..	..	..	..	..	1	1	..	2	..	2	7	9	13	20	32	15
Cerebral Haemorrhage, Cerebral Em- bolism	61	1	..	..	1	..	..	1	..	..	..	..	3	7	17	22	11	..
Apoplexy, Hemiplegia.....	34	..	..	..	..	..	..	..	..	..	..	1	..	5	9	15	3	1
Aneurysm .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Senile Gangrene	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Embolism, Thrombosis (not Cerebral) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Phlebitis	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Varicose Veins .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of Blood Vessels	2	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..
Laryngitis.....	12	..	1	1	2	4	1	1	8	2	1	..	1	..	..	..	..	..
Membranous Laryngitis (not Diph- theritic).....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Croup (not Spasmodic nor Membranous)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of Larynx and Trachea ..	136	27	12	19	58	16	2	2	78	..	1	..	1	2	5	9	19	12	
Bronchitis.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Emphysema, Asthma	4	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	..	..
Pleurisy	5	..	..	1	1	1	..	2	..	..	1	..	1	..	1	..	..	..

TABLE I.—CONTINUED.

CAUSES OF DEATH.	All Ages.	AGES AT DEATH.															55 to 60 upwards.				
		0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1.	2.	3.	4.	Total under 5 years.	5-10.	10-15.	15-20.	20-25.	25-35.	35-45.		45-55.	55-65.	65-75.	75- 85 and upwards.
<i>Ovarian Tumour</i> (not Malignant) .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of Ovary .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<i>Uterine Tumour</i> (not Malignant)	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Other Diseases of Uterus and Vagina .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Disorders of Menstruation .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of Gener. & Mamm. Organs.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Abortion, Miscarriage.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Mania	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Puerperal Convulsions	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..
Placenta Praevia, Flooding	3	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..
Other Accidents of Pregnancy and Childbirth	5	..	..	..	..	..	..	..	..	..	..	1	1	1	2	1	..	..	..	..
Caries, Necrosis	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Arthritis, Periostitis	2	..	1	1	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..
Other Diseases of Locomotor System	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1
Ulcer, Bed-sore .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eczema	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
Pemphigus .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Skin .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
OTHER SPECIFIED DISEASES.																					
Myocarditis	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Osteomyelitis	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE II.—DEATHS, DURING 1909, OF PERSONS BELONGING TO SOUTH SHIELDS—
CAUSES, AGES, AND DISTRIBUTION IN WARDS (L.G.B. TABLE IV.)

Causes of Death.	Deaths at subjoined Ages (Years).							Deaths in or belonging to the different Wards (at all Ages.)												Deaths in Public Insti- tutions in the Borough				
	All Ages.	0 to 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and over.	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Benits.	Ekeendykke	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Residence Unknown.	Included in cols. 2-23.	Non-Residents Excluded from cols. 2-23.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Smallpox																								
Measles	38	10	27	1				2	1	1	3	2	2	4	1	6	1	5	2	5	4			
Scarlet Fever	19	1	10	8				3	2	3	3	2	1	3	2	2	4	4	3	3	1		9	
Whooping Cough	36	14	22					1	2	1				3	4	5	4	6	3					
Diphtheria and Membranous Group	20	1	15	4				1	2		2		2	3	1		4	1	1	2	1		2	
Fever { Typhus																								
{ Enteric	4			2	2						1			1						1	1			
{ Other Continued																								
Epidemic Influenza	31			1	7	12	11	1	1	4	2	4	2	2		3	3	1	5	3			2	
Cholera																								
Plague																								
Diarrhoea	42	30	9	1			2	2	1	3		7	2	4		4	2	6	2	6	3		1	
Enteritis	24	11	4	1		3	5	5			3	1	1	1	2	3	1	1	3	1	2			
Puerperal Fever	3				1	2									1									
Erysipelas	3	2				1																		
Phthisis (Pulmonary Tuberculosis)	130		5	7	23	91	4	13	7	5	8	10	9	8	8	14	1	9	15	12	6			
Other Tubercular Diseases	62	7	35	13	6	6		1	5	8	1	5	8	6	3	4	2	6	6	2	1	4		
Cancer, Malignant Disease	78					51	27	6	7	3	7	5	3	6	5	3	8	7	10	2	6		6	
Bronchitis	136	58	20	1	1	21	35	13	10	6	12	12	21	13	5	11	2	8	10	9	4			
Pneumonia	121	35	36	9	4	24	13	11	13	6	12		6	12	5	13	3	10	12	11	7		1	
Pleurisy	5	1	1		1	2		1	1		1	3	1				1	2	2				3	
Other Diseases of Respiratory Organs	18	2	6	3		5	2	1	1	1	2	3	2	1	3			1	3	1	2			
Alcoholism, Cirrhosis of Liver	14			1	1	10	2		2	3	2		2	1	3			1						
Veneral Diseases	13	10	2			1		4	5	3	2	3	1	6	2	8		10	12	7	1			
Premature Birth	71	71						8	5	3	2	3	4	6	1									
Diseases and Accidents of Parturition	11					10		3					1	1	1	1								
Heart Diseases	207		1	3	5	16	92	22	16	14	20	19	12	10	1	13	7	12	19	14	11	3	3	
Accidents	62	2	5	5	8	31	11	4	5	7	1	3	6	4	4	7	1	6	5	3	1	7	20	
Suicides	9					9					1	1	2	2					1					
Homicide	1	1																						
All other Causes	615	212	55	21	21	144	162	57	45	36	42	43	44	62	29	51	27	53	42	47	35	2	34	
All Causes	1779	668	253	81	81	529	367	167	127	98	129	125	130	151	92	149	63	154	150	136	90	13	85	3

TABLE III.—DEATHS DURING 1909 OF PERSONS BELONGING TO SOUTH SHIELDS—
CAUSES, AGES, AND THE MONTHS IN WHICH THE DEATHS OCCURRED.

AGES AT DEATH.						Deaths at all ages.	MONTH.	CAUSES OF DEATH.																					
Under 1 year.	1 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 65 years.	65 and upwards.			Smallpox.	Measles.	Scarlet Fever.	Typhus Fever.	Influenza.	Whooping Cough.	Diphtheria and Membranous Croup.	<i>Pyrexia</i> , of uncertain origin.	Enteric Fever.	Diarrhea and Dysentery.	Pulmonary Tuberculosis (Tuberculous Phthisis).	<i>Phthisis</i> not otherwise defined.	Tuberculous Meningitis.	Tuberculous Peritonitis.	<i>Tuberculosis Maligna</i> .	All other Tuberculous Diseases.	Cancer.	Rheumatic Fever.	Pneumonia.	Bronchitis.	Childbirth & Puerperal Septic Diseases.	Violence.	All other causes.
31	26	7	8	57	35	164	January ..	..	2	5	2	4	..	..	..	..	12	2	5	2	..	7	8	..	11	19	2	4	79
42	14	10	5	49	33	153	February ..	..	2	1	2	1	..	..	..	..	5	1	2	3	..	4	3	..	7	13	2	8	99
41	22	7	5	55	48	178	March .....	..	2	10	3	1	..	..	..	..	8	2	3	..	..	1	5	..	13	19	1	5	103
32	20	6	9	36	40	143	April .....	..	4	2	7	2	..	..	2	3	7	3	3	5	..	1	6	..	10	8	1	5	77
31	29	9	7	47	39	162	May .....	..	9	2	6	3	..	..	..	1	7	3	3	2	..	..	12	2	9	8	1	3	92
34	27	10	5	41	25	142	June .....	..	12	1	2	..	..	..	..	6	6	6	4	1	..	1	8	1	13	8	1	5	72
40	23	7	9	32	18	129	July .....	..	7	1	6	..	..	..	..	9	3	3	3	2	..	..	5	..	7	4	1	1	68
35	16	4	4	49	21	129	August .....	..	3	..	..	1	..	..	..	7	6	1	1	1	..	2	7	..	8	4	2	6	77
38	13	5	8	32	23	119	September ..	..	2	2	1	2	..	..	..	10	6	6	3	1	..	..	3	..	8	3	..	7	67
38	13	4	9	38	28	130	October ..	..	1	..	..	3	..	..	1	8	9	3	3	2	..	..	9	..	8	4	2	4	71
63	30	5	5	42	30	175	November ..	..	3	2	3	1	..	..	..	8	4	5	2	1	..	2	8	..	14	30	1	8	83
43	20	7	7	51	27	155	December ..	..	..	5	3	2	..	..	1	4	17	1	..	2	1	1	4	1	13	16	..	5	77
468	253	81	81	529	367	1779	Totals ....	..	38	19	31	36	20	..	4	42	96	34	26	22	1	19	78	5	121	136	14	72	965

TABLE IV.—VITAL STATISTICS OF SOUTH SHIELDS
DURING 1909 AND PREVIOUS YEARS.

(L.G.B. TABLE I.)

Year.	Population estimated to middle of each year	Births.		Total Deaths occurring in the Borough.				Total Deaths in Public Institutions in the Borough	Deaths of Non-Residents in Public Institutions in the Borough.	Deaths of Residents in Public Institutions beyond the Borough.	Net Deaths at all Ages belonging to the Borough.	
		Number.	* Rate.	Under 1 Year of Age.		At all Ages.					Number.	* Rate.
				Number.	Rate per 1,000 Births registered.	Number.	* Rate.					
1	2	3	4	5	6	7	8	9	10	11	12	13
1899	93,657	3,371	36.0	593	175	1,829	19.5	75	20	108	1,917	20.7
1900	95,703	3,482	36.3	560	160	1,917	20.0	83	23	160	2,054	21.4
1901	97,800	3,607	36.8	613	169	1,865	19.0	90	8	163	2,020	20.6
1902†	103,330	3,759	36.4	563	149	1,862	18.0	90	16	165	2,011	19.4
1903	105,325	3,635	34.5	479	132	1,669	15.8	74	29	165	1,805	17.1
1904	107,334	3,705	34.5	522	141	1,773	16.5	71	1	176	1,948	18.1
1905	109,360	3,501	32.0	500	143	1,607	14.7	88	3	171	1,775	16.2
1906	111,402	3,531	31.7	513	145	1,768	15.9	96	6	231	1,993	17.9
1907	113,460	3,276	28.9	428	131	1,717	15.1	85	1	183	1,899	16.7
1908	115,535	3,481	30.1	449	129	1,598	13.8	71	2	194	1,790	15.5
Averages for years 1899-1908.	105,291	3,535	33.6	522	148	1,760	16.7	82	11	172	1,921	18.2
1909	117,627	3,388	28.9	460	136	1,597	13.6	88	3	185	1,779	15.1

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

† The Borough was extended, November, 1901.

NOTE.—The deaths included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the Borough. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-Residents" is meant persons brought into the Borough on account of sickness or infirmity and dying in public institutions there. The term "Residents" includes persons who have been taken out of the Borough on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public Institutions" taken into account for the purposes of this Table are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums.

For lists of Public Institutions, see page 7. The Union Workhouse is outside the Borough.

Area of Borough in acres (exclusive of area covered by water)	2344	Total population at all ages . .	100,858	} At Census of 1901.
		Number of inhabited houses . .	12,465	
		Average No. of persons per house	8.1	
		Do. do. tenement	4.6	

TABLE V.—BIRTH-RATES AND DEATH-RATES, SOUTH SHIELDS 1871-1909, PER 1,000 OF THE POPULATION.

YEAR.	Population.	Birth-rate.	Deaths under 1 year per 1,000 Births.	Gross Death-rate.	Total Zymotic Death-rate.	Smallpox.	Measles.	Scarlet Fever.	† Diphtheria.	Whooping Cough.	"Fever."	Diarrhoea.	Erysipelas, Pyæmia and Puerperal Fever.	Phthisis.	Other Tubercular Diseases.	Cancer.	† Diseases of Circulatory System.	Diseases of the Nervous System.	Diseases of the Respiratory System.	Diseases of the Urinary System.	Diseases of the Reproductive System.	Violence.
Mean 1871-80...	.....	43.1	164	25.5	6.0	.858	.42	1.44	.12	.78	.79	1.52	.25	1.91	...	...	1.23	...	...	...	...	.84
Mean 1881-90...	.....	38.8	140	20.5	2.3	.012	.34	.45	.10	.44	.19	.78	.12	1.84	...	...	1.64	...	...	...	...	.59
1891	78,920	37.4	176	22.1	2.85	...	.90	.11	.29	.61	.20	.73	.14	1.54	.89	.39	1.59	2.96	4.32	.31	.16	1.01
1892	80,530	37.0	143	19.4	1.62	.01	.30	.12	.10	.33	.23	.56	.18	1.51	1.52	.60	1.82	2.87	3.41	.43	.07	.67
1893	82,284	35.4	180	22.4	3.15	.04	.39	.38	.06	.36	.35	1.56	.09	1.99	1.28	.48	1.93	2.79	2.95	.39	.15	.81
1894	84,077	35.9	138	17.3	1.37	...	.19	.39	.05	.11	.20	.43	.06	1.41	.82	.71	1.72	2.23	3.14	.46	.10	.77
1895	85,910	35.1	187	21.2	3.36	...	.29	.18	.21	.30	.35	1.43	.05	1.65	1.09	.62	1.60	3.02	3.04	.51	.16	.66
Mean 1891-95...	.....	36.1	165	20.5	2.48	.01	.41	.24	.14	.47	.26	.95	.10	1.62	1.12	.56	1.73	2.77	3.77	.38	.13	.78
1896	87,784	35.7	165	18.5	2.49	...	.92	.18	.10	.42	.27	.58	.01	1.61	1.11	.61	2.01	2.59	3.14	.28	.11	.53
1897	89,699	35.9	154	17.2	1.83	...	.29	.15	.09	.25	.16	.88	.07	1.40	.92	.59	1.41	3.33	2.66	.27	.12	.52†
1898	91,656	37.0	182	21.5	3.09	...	.57	.25	...	.77	.39	1.11	.11	1.58	.88	.64	1.79	2.83	3.84	.31	.14	.80
1899	93,657	36.0	175	20.7	2.33	...	.04	.21	.06	.13	.47	1.41	.08	1.57	.68	.59	1.43	2.65	3.98	.57	.17	.90
1900	95,703	36.3	160	21.4	2.32	...	.55	.21	.12	.67	.20	.55	.12	1.83	.79	.73	1.96	2.34	3.67	.48	.11	1.07
Mean 1896-1900	.....	36.2	167	19.8	2.42	...	.47	.20	.08	.45	.30	.91	.08	1.59	.88	.71	1.72	2.75	3.46	.38	.13	.78
Mean 1891-1900	.....	36.1	166	20.1	2.45	.00	.44	.22	.11	.46	.28	.93	.09	1.60	1.00	.63	1.72	2.76	3.61	.33	.13	.78
Mean 1871-1900	.....	39.3	157	22.0	3.58	.29	.40	.70	.11	.56	.42	1.10	.15	1.78	...	...	1.53	...	...	...	...	.74
1901	97,800	36.8	169	20.6	3.36	...	.68	.60	.14	.10	.22	1.60	.09	1.63	.71	.68	1.65	2.83	2.84	.51	.10	.69
1902	103,336	36.4	149	19.4	2.63	.04	.92	.38	.06	1.01	.06	.16	.14	1.80	.64	.63	1.79	2.83	3.15	.37	.21	.73
1903	105,325	34.5	132	17.1	1.02	.01	.14	.11	.15	.03	.10	.47	.08	1.67	.71	.69	1.59	2.45	3.16	.45	.21	.55
1904	107,534	34.5	144	18.1	1.77	.07	.26	.07	.11	.59	.08	.58	.12	1.52	.81	.62	1.44	2.22	3.22	.42	.11	.53
1905	109,360	32.0	145	16.2	1.86	.04	.22	.05	.22	.58	.21	.54	.13	1.15	.59	.65	2.23	1.14	2.94	.45	.12	.52
Mean 1901-1905	.....	34.8	148	13.3	2.14	.03	.41	.24	.14	.47	.13	.66	.11	1.55	.69	.65	1.74	2.29	3.06	.44	.15	.60
1906	111,402	31.7	150	17.9	2.68	...	.98	.05	.27	.35	.08	.95	.16	1.49	.68	.64	2.33	1.44	2.76	.43	.18	.68
1907	113,460	28.9	133	16.7	1.37	...	.43	.08	.17	.42	.04	.13	.07	1.58	.70	.68	2.57	1.38	2.80	.36	.17	.77
1908	115,535	30.1	133	15.5	1.74	...	.28	.08	.20	.48	.07	.69	.06	1.19	.62	.75	2.34	1.41	2.33	.35	.12	.61
1909	117,627	28.9	138	15.1	1.35	...	.32	.16	.17	.31	.03	.36	.11	1.11	.58	.66	2.61	1.36	2.38	.38	.10	.61

* The Borough was extended, November, 1901.

† Since 1891, Membranous Group has been included.

‡ Previous to 1905, Apoplexy was included in Diseases of the Nervous System.

TABLE VI.—INFANTILE MORTALITY, SOUTH SHIELDS
DURING THE YEAR 1909.

Deaths from stated Causes in Weeks and Months under
One Year of Age.

(L.G.B. TABLE V.)

CAUSE OF DEATH.	Under 1 Week.	1-2 weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month	1-2 months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
ALL CAUSES—																	
Certified	89	22	18	13	142	60	27	32	22	26	24	15	27	13	18	22	423
Uncertified	13	1			14	3	4	4	1	3	2	1	1	3	3	1	40
COMMON INFECTIOUS DISEASES—																	
Smallpox																	
Chickenpox																	
Measles								1			1			4	2	2	10
Scarlet Fever																1	1
Diphtheria (including Mem- branous Croup)														1			1
Whooping Cough			1		1	2	1			1	1	2	1	1	1	3	14
DIARRHOEAL DISEASES—																	
Diarrhoea, all forms						4	3	2	3	6	2	1	3	1	3	2	30
Enteritis, Muco-enteritis, Gastro-enteritis											1	1			1		5
Gastritis, Gastric Catarrh			1		1		1	1	1			2					6
WASTING DISEASES—																	
Premature Birth	51	8	4	1	64	4		2		1							71
Congenital Defects	9	5	1		15	2		1			1						19
Injury at Birth	3				3												3
Want of Breast Milk, Starvation Atrophy, Debility, Marasmus	30	6	5	10	51	12	5	5	6	3	2		1				85
TUBERCULOUS DISEASES—																	
Tuberculous Meningitis						1							1				2
Tuberculous Peritonitis; Tubercu- lar Mesenterica								1						1			2
Other Tuberculous Diseases								1			1		1				3
OTHER CAUSES—																	
Erysipelas						1		1									2
Syphilis	2				2	2	2	1		1					1		10
Rickets										1							2
Meningitis (Not Tuberculous)			1		1		1		3	2	1	2	3				13
Convulsions	1	3	1	1	9	11	7	5	2	3	5	2	3		3	3	53
Bronchitis		1	2	1	4	16	7	8	2	2	5	3	3	1	3	4	58
Laryngitis										1					1		2
Pneumonia	2		1		3	4	2	2	4	4	3	2	6	2	2	1	35
Suffocation, overlying						2											2
Other Causes	1		1		2	2	1	5	1	3	2		7	5	3	7	39
Totals	102	23	18	13	156	63	31	36	23	28	26	16	23	16	21	23	468

Births in the year:—

Legitimate, 3,271.
Illegitimate, 117.

Deaths in the year:—

Legitimate Infants, 436.
Illegitimate Infants, 32.

Deaths from all Causes at all Ages- 1,779.

Population estimated to middle of 1909 117,627.

TABLE VII.—INFANTILE MORTALITY, SOUTH SHIELDS,
DURING THE YEAR 1909.

Deaths from stated Causes allocated to the various Wards.

CAUSE OF DEATH.	WARDS.															Total Deaths under One Year.
	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekendyke.	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Unknown.	
ALL CAUSES—																
Certified	35	28	25	27	32	33	44	18	40	14	41	32	44	15	...	428
Uncertified	8	3	2	1	2	4	2	...	5	2	5	2	2	2	...	40
COMMON INFECTIOUS DISEASES—																
Smallpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	1	...	1	...	1	1	1	...	2	...	1	...	2	...	...	10
Scarlet Fever .....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Diphtheria (including Mem- branous Croup) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Whooping Cough	2	1	...	...	2	...	...	2	1	2	2	2	...	...	...	14
DIARRHOEAL DISEASES—																
Diarrhoea, all forms	2	...	2	...	4	2	4	...	1	2	4	1	5	3	...	30
Enteritis. Muco-enteritis, Gastro-enteritis	2	...	...	...	...	...	...	...	2	...	1	...	...	...	...	5
Gastritis. Gastric Catarrh	2	...	...	1	...	...	1	...	1	1	...	...	...	...	...	6
WASTING DISEASES—																
Premature Birth	8	5	3	2	3	4	6	2	8	...	10	12	7	1	...	71
Congenital Defects	3	2	1	2	3	...	...	1	1	...	2	1	...	3	...	19
Injury at Birth .....	...	...	...	...	1	...	1	...	...	...	...	1	...	...	...	3
Want of Breast-milk, Starv- ation .....	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Atrophy, Debility, Marasmus	7	5	4	6	4	4	11	4	6	3	10	5	11	5	...	85
TUBERCULOUS DISEASES—																
Tuberculous Meningitis .....	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	2
Tuberculous Peritonitis; Tubes Mesenterica .....	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
Other Tuberculous Diseases .....	...	...	...	...	...	...	1	...	...	1	...	...	1	...	...	3
OTHER CAUSES—																
Erysipelas .....	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	2
Syphilis	1	...	3	...	1	1	1	...	...	...	1	1	...	1	...	10
Rickets .....	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	2
Meningitis (<i>Not Tuberculous</i>)	1	...	1	1	...	4	4	1	...	1	...	...	...	...	...	13
Convulsions	6	3	3	2	7	6	3	1	9	3	4	...	5	1	...	53
Bronchitis	5	6	3	6	6	10	6	2	3	...	3	5	3	...	...	58
Laryngitis .....	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	2
Pneumonia .....	...	4	2	6	...	1	2	3	5	2	4	1	4	1	...	35
Suffocation, overlying .....	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	2
Other Causes	3	5	2	1	1	3	3	2	6	...	2	4	4	2	...	38
Total Deaths under 1 year of age	43	31	27	28	34	37	46	18	45	16	46	34	46	17	...	468
Total Deaths at all ages	167	127	98	129	125	130	151	92	149	68	154	150	136	90	13	1779
Number of Births during 1909 ..	215	268	160	188	201	253	339	135	290	163	385	283	251	257	...	3388
Infantile Mortality Rate	200	116	169	142	169	146	136	133	155	98	119	120	123	66	...	138

TABLE VIII.—CASES OF INFECTIOUS DISEASE NOTIFIED AND REMOVED TO HOSPITAL IN SOUTH SHIELDS DURING THE YEAR 1909, CLASSIFIED ACCORDING TO WARD AND AGE.
(L.G.B. TABLE III).

Notifiable Disease.	Cases notified in whole Borough.						Total Cases notified in each Ward.												No. of Cases removed to Hospital from each Ward.																	
	At following Ages — Years.						Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Reken dyke.	Westoe.	Deans. H.	Tyne Dock.	Shinonside.	West Park.	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Reken dyke.	Westoe.	Deans. H.	Tyne Dock.	Shinonside.	West Park.	Totals.	
	At all Ages.																																			
	Under 1.	1 to 3.	5 to 13.	15 to 25.	25 to 65.	65 and upwards																														
Smallpox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Group) ..	93	3	36	45	5	4	..	6 11	..	10	..	..	3 11	8	4	8	5	1 10	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	89	3	3	8	14	57	4	2 8	3	9	7	6	13	3	3	13	4	3	4	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	494	3	145	316	19	11	..	16 47	11	41	16	30	22	45	23	51	63	17	52	60	11	30	11	21	12	26	16	25	16	23	53	13	41	35	333	
Typhus Fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	30	..	2	9	10	9	..	5	1	4	..	..	6	..	2	6	3	1	2	..	5	1	1	..	..	..	6	..	2	4	2	..	..	..	..	..
Relapsing Fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	4	..	..	..	2	2	..	1	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	710	9	186	378	50	83	4	24	72	15	64	23	39	52	56	32	78	75	21	69	90	11	35	12	22	12	26	22	25	18	27	55	13	41	35	354

Borough Isolation Hospitals

{ Denes Fever Hospital, situate in Deans Ward, has 36 beds for Scarlet Fever, 13 beds for Typhoid Fever.
 Whiteleas Smallpox Hospital, situate about $\frac{1}{2}$ mile South of the Borough Boundary, in the South Shields Rural District, has 22 beds for Smallpox, as well as some accommodation for contacts.

TABLE IX.—COMPARATIVE RATES OF PREVALENCE OF SICKNESS AND DEATH FROM
INFECTIOUS (NOTIFIABLE) DISEASES IN SOUTH SHIELDS.

(Rates calculated per 1,000 of the population, estimated to the middle of each year).

Year.	Smallpox.		Cholera.		Erysipelas.		Diphtheria and Membranous Croup.		Scarlet Fever.		Typhus Fever.		Enteric Fever.		Continued and Relapsing Fevers.		Puerperal Fever.		Plague.	
	Attack	Death.	Attack	Death.	Attack	Death.	Attack	Death.	Attack	Death.	Attack	Death.	Attack	Death.	Attack	Death.	Attack	Death.	Attack	Death.
1899	.02	..	..	..	.92	.03	.35	.06	7.1	.21	..	..	1.87	.47	.02	..	.04	.02	..	..
1900	.02	..	..	..	.83	.05	.30	.12	5.3	.21	..	..	.74	.20	.06	..	.04	.02	..	..
1901	..	..	..	..	.80	.03	.36	.14	12.5	.60	..	..	1.17	.22	.02	..	.05	.01	..	..
1902	.69	.04	..	..	.95	.03	.26	.06	8.0	.38	..	..	.64	.06	..	..	.07	.03	..	..
1903	.33	.01	..	..	1.04	.03	.79	.15	3.6	.11	..	..	1.55	.10	..	..	.06	.02	..	..
1904	.94	.07	..	..	.91	.03	.68	.11	2.9	.07	..	..	.55	.08	.01	..	.02	.02	..	..
1905	.91	.04	..	..	1.07	.05	.94	.22	2.1	.05	..	..	.77	.21	..	..	.04	.04	..	..
1906	.01	..	..	..	.90	.07	1.51	.27	1.9	.05	..	..	.48	.08	..	..	.01	.01	..	..
1907	..	..	..	..	.56	.01	1.17	.17	2.9	.08	..	..	.42	.04	..	..	.04	.04	..	..
1908	..	..	..	..	.84	.03	1.11	.20	2.5	.08	..	..	.34	.07	..	..	.04	.01	..	..
1909	..	..	..	..	.76	.03	.79	.17	4.2	.16	..	..	.26	.03	..	..	.03	.03	..	..

TABLE X.—SUMMARY OF METEOROLOGICAL OBSERVATIONS, 1909. TAKEN AT 9 A.M. DAILY, AT THE
NORTH MARINE PARK AND HEALTH OFFICE, SOUTH SHIELDS.

MONTH.	Barometer. (Corrected to sea level and 32 deg. F.)	Shade.			Mean Temperature: 1 foot Earth Thermometer.	Mean Temperature: 4 feet Earth Thermometer.	Mean Humidity.	Total Rainfall (in inches).	Greatest Rainfall in any twenty-four hours.	Number of days on which rain fell .01 ins. or more.	Anemometer: Mean Daily Mileage.	DIRECTION OF WIND: NUMBER OF DAYS.								
		Mean Temperature.	Highest Temperature Registered.	Lowest Temperature Registered.								N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
January . . .	29.990	38.6	51.6	22.4	37.2	46.3	81	0.62	0.17	13	322	..	..	..	1	8	6	13	2	1
February ..	30.076	38.4	55.4	28.4	36.7	44.6	83	1.27	0.53	12	321	6	1	2	..	8	2	9	..	..
March	29.484	38.1	54.8	23.0	38.0	43.7	87	4.27	0.79	22	385	9	..	6	5	4	1	3	..	3
April	29.862	47.6	68.7	30.5	45.6	45.4	71	2.77	0.54	17	319	1	2	1	3	5	5	8	3	2
May	30.038	51.1	70.5	31.0	51.0	48.3	68	1.76	1.02	11	323	5	3	3	4	4	6	6	..	..
June	29.936	53.1	69.0	38.3	56.5	51.7	78	2.20	0.66	14	318	8	9	8	..	2	..	2	1	..
July	29.752	59.0	73.0	40.8	58.9	53.9	69	2.27	0.48	20	345	5	2	..	..	2	1	20	..	1
August	29.878	60.2	79.5	45.0	58.8	55.7	75	2.76	0.50	17	268	5	5	..	..	5	5	9	1	1
September .	29.991	53.6	67.8	40.4	52.8	53.9	81	1.57	0.39	17	312	8	5	3	..	4	2	4	3	1
October	29.638	51.2	66.5	28.0	49.0	52.3	80	2.61	0.64	20	336	1	1	1	..	16	5	6	1	..
November ...	29.942	41.7	58.4	29.3	40.2	46.9	82	0.87	0.22	11	331	3	1	..	..	6	3	12	4	1
December ..	29.559	39.3	53.6	25.8	37.8	43.3	86	3.79	0.83	19	352	4	..	5	..	8	3	8	2	1
TOTALS .....	..	..	..	..	..	..	..	26.76	..	193	..	55	29	29	13	72	39	100	17	11
AVERAGES..	29.845	47.7	..	..	46.9	48.8	78	..	..	..	328	..	..	..	..	..	..	..	..	..

The highest temperature registered during the year was 79.5 degrees Fahr., on August 15th, and the lowest temperature was 22.4 degrees Fahr., on January 27th-28th. The greatest rainfall during 24 hours was 1.02 in., on May 25th-26th. The total rainfall at the Denes Hospital grounds was 29.33 in.